

## GLOSSARY OF TERMS

AOC	Assimilable organic carbon
BEMX	Brominated forms of EMX
BF <sub>3</sub> /MeOH	Boron trifluoride methanol complex
BMX-1	3-Chloro-4-(bromochloromethyl)-5-hydroxy-2(5H)-furanone
BMX-2	3-Chloro-4-(dibromomethyl)-5-hydroxy-2(5H)-furanone
BMX-3	3-Bromo-4-(dibromomethyl)-5-hydroxy-2(5H)-furanone
CCF	Carbon contactor filtered
CH <sub>2</sub> N <sub>2</sub>	Diazomethane
CI	Chemical ionization
Cl <sub>2</sub>	Chlorine
CLSA	Closed-loop stripping analysis
ClO <sub>2</sub>	Chlorine dioxide
ClO <sub>2</sub> <sup>-</sup>	Chlorite
CT	Concentration-time
DCAN	Dichloroacetonitrile
DIW	Deionized water
DBP	Disinfection by-product
DCP	Dichloropropanone
DOC	Dissolved organic carbon
DS	Distribution system
DXAA	Sum of dihaloacetic acids (dichloro-, bromochloro-, dibromoacetic acid)
EBCT	Empty bed contact time
ECD	Electron capture detector
EI	Electron ionization
EMX	(E)-2-Chloro-3-(dichloromethyl)-4-oxobutenoic acid
EtAc	Ethyl acetate
FE	Filter effluent
FI	Filter influent
GAC	Granular activated carbon
GC	Gas chromatography or Gas chromatograph
H <sub>2</sub> SO <sub>4</sub> /MeOH	Sulfuric acid in methanol
HAAs	Haloacetic acids
HAA5	Sum of 5 HAAs (monochloro-, monobromo-, dichloro-, dibromo-, trichloroacetic acid)
HAA9	Sum of 9 HAAs (HAA5 + bromochloro-, bromodichloro-, dibromochloro-, tribromoacetic acid)
HANs	Haloacetonitriles

HKs	Haloketones
HNMs	Halonitromethanes
HPLC	High performance liquid chromatography
HRMS	High resolution mass spectrometry
ICR	Information Collection Rule
ID	Inner diameter
IS	Internal standard
KHP	Potassium hydrogen phosphate
LLE	Liquid-liquid extraction
MBA	Mucobromic acid
MCA	Mucochloric acid
MCL	Maximum contaminant level
MDL	Method detection limit
MEK	Methyl ethyl ketone
MeOH	Methanol
MG	Million gallons
mgd	Million gallons per day
MS	Mass spectrometry
MtBE	Methyl <i>tertiary</i> -butyl ether
MW	Molecular weight
MWDSC	Metropolitan Water District of Southern California
MX	3-chloro-4-(dichloromethyl)-5-hydroxy-2(5H)-furanone
MX-analogues	MX, ZMX, EMX, ox-MX, ox-EMX, red-MX, MCA, BMX-1,2,3
MXR	Esterified form of MX
MXR-analogues	Esterified forms of MX-analogues
NA	Not available
ND	Not detected at or above minimum reporting level (MRL)
NH <sub>2</sub> Cl	Chloramines
NMR	Nuclear magnetic resonance
NR	Not reported
NS	Not sampled
N <sub>2</sub>	Nitrogen gas
NH <sub>3</sub>	Ammonia
NOM	Natural organic matter
O <sub>3</sub>	Ozone
OE	Ozone contactor effluent
Ox-EMX	Oxidized EMX, (E)-2-Chloro-3-(dichloromethyl)butenedioic acid
Ox-MX	Oxidized MX, (Z)-2-Chloro-3-(dichloromethyl)butenedioic acid
Ox-NOM	Oxidized NOM
PE	Plant effluent
PFBHA	Pentafluorobenzylhydroxylamine

P&T	Purge-and-trap
Red-MX	Reduced MX, 3-Chloro-4-(dichloromethyl)-2(5H)-furanone
RDL	Reporting detection level
RM	Rapid mix
SDS	Simulated distribution system
SIR	Selected ion monitoring
SPE	Solid phase extraction
SPME	Solid phase microextraction
SUVA	Specific ultraviolet absorbance
TCP	Trichloropropanone
THMs	Trihalomethanes
THM4	Sum of 4 regulated THMs (chloroform, bromoform, bromodichloromethane, dibromochloromethane)
TIC	Total ion chromatogram
TLC	Thin layer chromatography
TOC	Total organic carbon
TT	Treatment tank effluent
TXAA	Sum of trihaloacetic acids (trichloro-, bromodichloro-, dibromochloro-, tribromoacetic acid)
UNC	University of North Carolina
USEPA	United States Environmental Protection Agency
UV	Ultraviolet light
VOC	Volatile organic compound
WTP	Water treatment plant
ZMX	(Z)-2-Chloro-3-(dichloromethyl)-4-oxobutenoic acid